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Claims

This listing of claims will replace all prior versions.

CLAIMS

What is claimed is:

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91. Canceled.
92. (Original) An electronic tag apparatus, comprising:
a slot formed at a selected azimuthal location in an inner wall of a tubular member;
an electronic tag disposed in the slot; and
a potting material disposed in the slot, the potting material adapted to form a barrier between the electronic tag and the inner wall of the tubular member and to adhesively bond the electronic tag to the slot.
93. (Original) The apparatus of claim 92, further comprising a cover adapted to be positioned in the slot and to cover at least a portion of the electronic tag.
94. (Original) The apparatus of claim 93, wherein the cover comprises a flange adapted to mechanically secure the cover in the slot.
95. (Original) An electronic tag apparatus, comprising:
a plurality of slots formed at selected azimuthal and axial locations in an inner wall of a tubular member;
an electronic tag disposed in each slot; and
a potting material disposed in the plurality of slots, the potting material adapted to form a barrier between each electronic tag and the inner wall of the tubular member and to adhesively bond each electronic tag to its corresponding slot.
96. (Original) An electronic tag apparatus, comprising:
a circumferential undercut slot formed in an inner wall of a tubular member;
an electronic tag disposed in the undercut slot; and

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a potting material disposed in the undercut slot, the potting material adapted to form a barrier between the electronic tag and the inner wall of the tubular member and to adhesively bond the electronic tag to the slot.

97. (Original) The apparatus of claim 96, wherein the electronic tag comprises a flexible metal installation ring adapted to deform when being inserted into the slot and to return to a substantially undeformed shape after insertion.
98. (Original) The apparatus of claim 96, wherein the electronic tag comprises a flexible polytetrafluoroethylene installation ring adapted to deform when being inserted into the slot and to return to a substantially undeformed shape after insertion.
99. (Original) The apparatus of claim 96, wherein the electronic tag comprises a flexible epoxy installation ring adapted to deform when being inserted into the slot and to return to a substantially undeformed shape after insertion.
100. (Original) The apparatus of claim 96, wherein the electronic tag comprises a ratchet installation ring adapted to radially expand so as to fit within the circumferential slot.
101. (Original) The apparatus of claim 96, wherein the electronic tag comprises biased tabs formed thereon, the tabs adapted to compress so the electronic tag can be inserted in the slot and to release into a securing position after insertion.
102. (Original) An electronic tag apparatus, comprising:
a circumferential slot formed in an inner wall of a tubular member; and
an electronic tag coupled to a circumferential ring, the circumferential ring

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disposed in the undercut slot and adapted to secure the electronic tag in place.

103. (Original) The apparatus of claim 102, wherein the circumferential ring comprises a flexible metal installation ring adapted to deform when being inserted into the slot and to return to a substantially undeformed shape after insertion.
104. (Original) The apparatus of claim 102, wherein the circumferential ring comprises a ratchet installation ring adapted to radially expand so as to fit within the circumferential slot.
105. (Original) The apparatus of claim 102, wherein the circumferential ring comprises biased tabs formed thereon, the tabs adapted to compress so the circumferential ring can be inserted in the slot and to release into a securing position after insertion.
106. (Original) The apparatus of claim 102, wherein the circumferential ring comprises a polymer material.
107. (Original) The apparatus of claim 102, wherein the circumferential ring comprises a ceramic material.
108. (Original) The apparatus of claim 102, wherein the circumferential ring comprises an epoxy.
109. (Original) The apparatus of claim 102, wherein the circumferential ring comprises ridges formed on an outer surface thereof, the ridges adapted to axially secure the circumferential ring in place in the circumferential slot.

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110. (Original) The apparatus of claim 102, wherein the circumferential ring comprises a split ring.
111. (Original) An electronic tag apparatus, comprising:
a first casing joint comprising threads formed on an outer surface thereof;
a second casing joint comprising threads formed on an outer surface thereof;
a casing collar comprising threads formed on an inner surface thereof, the casing collar threadedly connected to the first casing joint and the second casing joint; and
a threaded ring comprising an electronic tag and threads formed on an outer surface thereof, the threaded ring threadedly connected to the casing collar and positioned between the first and second casing joints.
112. (Original) The apparatus of claim 111, wherein the threaded ring comprises a split ring.
113. (Original) An electronic tag apparatus, comprising:
a first tubular member comprising a circumferential slot formed proximate an end thereof;
an electronic tag coupled to a circumferential ring, the circumferential ring disposed in the circumferential slot; and
a second tubular member positioned adjacent to the first tubular member proximate the slotted end so as to axially restrain the circumferential ring in the circumferential slot.
114. (Original) The apparatus of claim 113, wherein the circumferential ring comprises

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a flexible metal ring adapted to deform when being inserted into the slot and to return to a substantially undeformed shape after insertion.

115. (Original) The apparatus of claim 113, wherein the circumferential ring comprises a flexible polytetrafluoroethylene ring adapted to deform when being inserted into the slot and to return to a substantially undeformed shape after insertion.
116. (Original) The apparatus of claim 113, wherein the circumferential ring comprises a flexible epoxy ring adapted to deform when being inserted into the slot and to return to a substantially undeformed shape after insertion.
117. (Original) The apparatus of claim 113, wherein the circumferential ring comprises a ratchet ring adapted to radially expand so as to fit within the circumferential slot.
118. (Original) The apparatus of claim 113, wherein the circumferential ring comprises a polymer material.
119. (Original) The apparatus of claim 113, wherein the circumferential ring comprises a ceramic material.
120. (Original) The apparatus of claim 113, wherein the circumferential ring comprises an epoxy.
121. (Original) The apparatus of claim 113, wherein the circumferential ring comprises ridges formed on an outer surface thereof, the ridges adapted to axially secure the circumferential ring in place in the circumferential slot.

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122. (Original) The apparatus of claim 113, wherein the circumferential ring comprises a split ring.
123. (Original) An electronic tag apparatus, comprising:
a first tubular member comprising a slot formed proximate an end thereof, the slot forming an opening in an inner surface of the tubular member;
an electronic tag disposed in the slot; and
a second tubular member positioned adjacent to the first tubular member proximate the slotted end so as to axially restrain the electronic tag in the slot.
124. (Original) The apparatus of claim 123, wherein the slot is filled with a potting material after the electronic tag is disposed therein.
125. (Original) An electronic tag apparatus, comprising:
first and second tubular members disposed in a wellbore;
a collar disposed between the first and second tubular members; and
a circumferential ring comprising an electronic tag coupled thereto, the circumferential ring disposed proximate a circumferential slot formed in an inner surface of the collar.
126. (Original) The apparatus of claim 125, wherein the circumferential ring comprises a flexible metal ring adapted to deform when being inserted into the slot and to return to a substantially undeformed shape after insertion.
127. (Original) The apparatus of claim 125, wherein the circumferential ring comprises a flexible polytetrafluoroethylene ring adapted to deform when being inserted into

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the slot and to return to a substantially undeformed shape after insertion.

128. (Original) The apparatus of claim 125, wherein the circumferential ring comprises a flexible epoxy ring adapted to deform when being inserted into the slot and to return to a substantially undeformed shape after insertion.
129. (Original) The apparatus of claim 125, wherein the circumferential ring comprises a ratchet ring adapted to radially expand so as to fit within the circumferential slot.
130. (Original) The apparatus of claim 125, wherein the circumferential ring comprises a polymer material.
131. (Original) The apparatus of claim 125, wherein the circumferential ring comprises a ceramic material.
132. (Original) The apparatus of claim 125, wherein the circumferential ring comprises an epoxy.
133. (Original) The apparatus of claim 125, wherein the circumferential ring comprises ridges formed on an outer surface thereof, the ridges adapted to axially secure the circumferential ring in place in the circumferential slot.
134. (Original) The apparatus of claim 125, wherein the circumferential ring comprises a split ring.
135. (Original) An electronic tag apparatus comprising:
a tubular member;

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an electronic tag disposed in the tubular member; and
a signal boosting apparatus disposed in the tubular member proximate the
electronic tag.

136. (Original) The apparatus of claim 135, wherein the signal boosting apparatus comprises a wire loop and the electronic tag is disposed inside the wire loop.
137. (Original) The apparatus of claim 135, wherein the signal boosting apparatus comprises a wire loop and the electronic tag is disposed outside the wire loop.
138. (Original) The apparatus of claim 135, wherein the signal boosting apparatus comprises a wire loop, and at least a portion of the wire loop is wound around a core.
139. (Original) The apparatus of claim 138, wherein the core comprises ferrite.
140. (Original) The apparatus of claim 138, wherein the portion the wire loop wound around the core forms a spring so that the signal boosting device may be deformed so as to install the signal boosting device in the tubular member.
141. (Original) The apparatus of claim 135, further comprising an installation ring, wherein the electronic tag and the signal boosting apparatus are disposed in slots formed in the installation ring, and the installation ring is adapted to be disposed in the tubular member.
142. (Original) The apparatus of claim 135, wherein the electronic tag is coupled to the signal boosting apparatus.

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143. (Original) The apparatus of claim 142, wherein the electronic tag is formed as a disk and is coupled to an exterior surface of a metal ring comprising the signal boosting apparatus.